

ABSTRACT

A byte boundary information recovery mechanism locates the first bits of respective bytes of an asynchronous transfer mode (ATM)-based serial data stream, used by a frame synchronization mechanism to delineate respective cells of the ATM stream, and thereby enables transceiver equipment to successfully receive and parse ATM traffic. The invention employs a counter offset-based scheme that generates an output signal in potential alignment with the (first bit) boundary of a byte of the data stream, in response to the contents of a counter reaching a prescribed count value. It then iteratively shifts, as necessary, the bit time at which the output signal is produced relative to the counting operation of the counter, until the output signal is aligned with the boundary of a byte of the data stream .